**Translating ER Diagram to Relations**

**Step 1: Define Relations for Each Entity**

User(u\_id, u\_name, u\_date, location)

Post(p\_ID, p\_type, p\_date, title, p\_body, parent\_id, accepted\_id)

Comment(c\_id, c\_date, text)

Tag(t\_id, t\_name)

**Step 2: Define Relations for Each Relationship Set**

Favs(u\_id, p\_id, f\_date)

Posttags(p\_id, t\_id)

Vote(p\_id, u\_id, f\_date, f\_type)

Holds(p\_id, c\_id)

**Step 3: Modify Keys to Capture Mapping Constraints**

Many-to-many: No Change

Many-to-One: Primary key is the key of the entity set on the many side

Holds(c\_id, p\_id)

One-to-one: no one-to-one representation in diagram

**Step 4: Eliminated Identical Relations**

* No Identical Relations

**Step 5: Merge Relations to Capture Participation Constraints**

* For total participation: merge relations and define foreign key NOT NULL
* Merge together Comment(c\_id, c\_date, text) and Holds(c\_id, p\_id)
* Result: Comment(c\_id, p\_id, c\_date, text)

